

LISTING OF THE CLAIMS

We Claim:

1. (cancelled)
2. (currently amended) A stent having a metallic, at least partially radiolucent carrier structure comprising a cut out metal tube including legs defining a mesh, and having at least one unitary core marker element welded to at least one leg, the unitary core marker element including a comparatively radiopaque material filling the interior and completely enclosed by a unitary cover layer of a metal or metal compound including material other than the comparatively radiopaque material, and together the comparatively radiopaque material and the unitary cover layer form a core filled wire, wherein the unitary cover layer includes a titanium nickel alloy, and wherein the metal forming the carrier structure is the titanium nickel alloy included in the unitary cover layer.
3. (currently amended) A The stent as set forth in claim 2, wherein the carrier structure is a self-expanding carrier structure.
4. (currently amended) A The stent as set forth in claim 3, wherein the carrier structure includes a shape memory metal which changes its shape at a change temperature, wherein the stent is of such a design configuration that the stent retains a compressed condition below the change temperature and assumes an expanded condition above the change temperature.

5. (currently amended) A The stent as set forth in claim 2, wherein the unitary cover layer contains silicon carbide (SiC).
6. (currently amended) A The stent as set forth in claim 2, ~~wherein the carrier structure is formed from the metal or the metal compound which the unitary cover layer includes~~ and wherein the unitary core marker element is attached to the carrier structure at the unitary cover layer.
- 7-8 (cancelled)
9. (currently amended) A The stent as set forth in claim 2, wherein the unitary core marker element is attached to the carrier structure in a region of a longitudinal end of the stent.
10. (cancelled)
11. (cancelled)
12. (currently amended) A The stent as set forth in claim 2, wherein the comparatively radiopaque material contains gold, platinum or palladium.
- 13-19 (cancelled)

20. (currently amended) A method of treating a patient, the method comprising implanting a self-expanding stent into the patient, wherein the stent comprises a metallic, at least partially radio translucent carrier structure comprising a cut out metal tube at least partially of titanium-nickel alloy including legs defining a mesh and at least one unitary core marker element welded to at least one leg, and wherein the at least one unitary core marker element includes comparatively radiopaque material filling the interior and completely enclosed by a unitary cover layer of a metal or metal compound material other than the radiopaque material ~~and~~, wherein the unitary cover including includes the titanium-nickel alloy, and together the comparatively radiopaque material and the unitary cover layer form a core filled wire.
21. (currently amended) A The stent as set forth in claim 2, wherein the carrier structure includes at least one aperture produced by cutting out at least one of the legs, and wherein the at least one unitary core marker element is welded in the at least one aperture.
22. (currently amended) A The stent as set forth in claim 2, wherein a plurality of the legs form at least one leg ring.
23. (currently amended) A The stent as set forth in claim 22, wherein the at least one leg to which the at least one unitary core marker element is welded is a member of the plurality of the legs forming the at least one leg ring.
24. (currently amended) A The stent as set forth in claim 22, wherein the at least one marker element forms an end portion.